



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/977,072	10/12/2001	Joel B. Douglas	2316.1581US01	1778

23552 7590 07/31/2003

MERCHANT & GOULD PC  
P.O. BOX 2903  
MINNEAPOLIS, MN 55402-0903

EXAMINER

LAVARIAS, ARNEL C

ART UNIT PAPER NUMBER

2872

DATE MAILED: 07/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/977,072

Applicant(s) **AA**

DOUGLAS ET AL.

Examiner

Arnel C. Lavarias

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 30 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-6,9-33,35 and 36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6,9-33,35 and 36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 30 May 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Drawings***

1. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on 5/30/03 in Paper No. 6 have been approved.

### ***Response to Amendment***

2. The amendments to the specification of the disclosure in Paper No. 6, dated 5/30/03, are acknowledged and accepted. In view of these amendments, the objections to the specification in Section 3 of Paper No. 5, dated 2/6/03, are respectfully withdrawn.
3. The cancellation of Claims 7-8, and 34 in Paper No. 6, dated 5/30/03, is acknowledged and accepted. In view of the cancellation of Claim 34, the claim objections in Section 4 of Paper No. 6, dated 5/30/03, are respectfully withdrawn.
4. The amendments to Claims 1, 9, 14, 20, 26, 29, 33, and 35 in Paper No. 6, dated 5/30/03, are acknowledged and accepted.

### ***Response to Arguments***

5. The Applicants' arguments, see Pages 13-15, 18 of Paper No. 6, filed 5/30/03, with respect to the rejections of newly amended Claims 1-2, 12-15, 24-31, 33-34, and 36 under 35 U.S.C. 102(b) have been fully considered. However, upon further consideration of the newly added limitations of the amended claims, a new ground(s) of rejection is made in

view of Vidacovich et al. (U.S. Patent No. 5402515), Swenson et al. (U.S. Patent Application Publication 2002/0131749), and Daoud (U.S. Patent No. 6453107).

6. The Applicants argue that, with respect to newly amended Claims 20-21, and 23, Vidacovich et al. fails to teach or reasonably suggest a base defining a cable entry region having a second width of no more than 50% of the first width of the storage region and the sidewall and base defining a neck having a flared entrance, the neck including a curved trough extending from the storage region toward the flared entrance through the cable entry region. The Examiner respectfully disagrees. Vidacovich et al. discloses, although not specifically pointed out, a necked region formed by sidewalls and the base (See region near 54 in Figure 3) wherein the sidewalls flare out near the entrance (See entrance near 52 in Figure 3). The neck also includes a curved trough (See curved sidewalls near region 54 in Figure 3) that extends from the storage region (See area near 57 in Figure 3) to the flared entrance. Additionally, the width of the necked region is shown to be at least 50% that of any width of the storage region.

7. Claims 1-6, 9-33, 35-36 are rejected as follows.

#### ***Claim Objections***

8. Claim 36 is objected to under 37 CFR 1.75(c) as being in improper form because a dependent claim cannot depend on a cancelled claim. See MPEP § 608.01(n). Accordingly, Claim 36 has not been further treated on the merits.

#### ***Claim Rejections - 35 USC § 103***

Art Unit: 2872

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-2, 12-19, 24-31, 32-33, 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vidacovich et al. (U.S. Patent No. 5402515) in view of Daoud (U.S. Patent No. 6453107).

Vidacovich et al. discloses a storage tray arrangement for storing cable slack (See Figures 1, 7-9, 11, 13) comprising a frame being oriented in a vertical first plane (See for example left side panel and tray 124 of Figure 9); a first tray mounted to the frame in a vertical second plane parallel to the first plane (See for example left side panel and tray 124 of Figure 9; the Examiner notes that although 124 is not directly mounted to the left vertical side panel, it is mounted to said panel via mounting structure 136, 138, as shown in Figure 10A, and the bottom panel) and including a cable entry region (See either area near 96 or area near 54 as cable entry area in Figure 3), a base (See base plate near 32 of Figure 3), and a spool projecting from the base (See 56 in Figure 3); and a mounting construction pivotably securing the first tray to the frame (See 38 in Figure 3; 136, 138 in Figure 10A) and permitting the first tray to be selectively pivoted relative to the frame within the second plane (See Figures 10A, 10B for opened and closed positions of tray 124). The tray includes a sidewall extending from the base and extending along at least a portion of the perimeter of the base (See sidewall along perimeter of tray 124 in Figure 3).

Additionally, Vidacovich et al. discloses a method for storing cable slack comprising providing a frame oriented in a vertical first plane; providing a first tray mounted to the frame in a vertical second plane parallel to the first plane; pivoting the first tray about a first pivot axis (See Figure 10B; pivot axis defined by axis through 136) 100-180 degrees (See Figure 10C) relative to the frame within the second plane; and directing a first cable into the first tray (See Figures 1, 3-4, 7-11, 13). Vidacovich et al. additionally discloses the step of providing a first tray including providing a first tray having a cable entry region, a base, and a spool projecting from the base; and the step of directing a first cable into the first tray including directing a first cable into the cable entry region and around the spool of the first tray (See Figures 3 and 4). Vidacovich et al. also discloses providing a second tray mounted to the frame in a vertical third plane parallel to the first plane and second plane; pivoting the second tray about the first pivot axis no more than 90 degrees (See Figure 10B) relative to the frame within the third plane (See Figures 9, 11-12); and directing a second cable into the second tray.

Further, Vidacovich et al. discloses a fiber management system comprising a vertically oriented wall; a first tray set including a first tray mounted on the wall and being pivotable in a first plane parallel to the wall about a first pivot axis; and a second tray mounted on the wall and being pivotable in a second plane parallel to the wall about the first pivot axis. Vidacovich et al. additionally discloses a plurality of tray sets, each tray set including two trays pivotably mounted on the wall about a common pivot axis and each of the two trays being pivotable in a vertical plane parallel to the wall (See Figures 9-12. The Examiner notes that, for example in Figure 11, pairs of trays may be

called a set, allowing multiple tray sets to share the same pivot axis and the trays to have the same parallel planes as the left side panel. Additionally Figure 13 discloses multiple sets of trays stacked vertically on top of each other, and stacks of multiple sets of trays placed next to each other.).

With regard to Claims 1-2, 12-17, 24-31, 33, Vidacovich et al. discloses the invention as set forth above. Vidacovich et al. lacks the mounting construction including a detent-recess arrangement configured to permit the first (and second) tray to be selectively pivotably mounted relative to the post in a plurality of discrete positions. However, Daoud teaches an optical fiber storage tray arrangement (See for example Figures 2, 5-6, 8, 10) wherein the construction to mount the tray onto the frame of the storage tray arrangement includes a detent-recess arrangement (See Abstract; Figures 4-6; col. 3, line 53-col. 5, line 13 for example) to allow the tray to be pivotably mounted and positioned in a plurality of discrete positions (See Figure 2 for the trays being in two such positions). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the mounting structure in the storage tray arrangement of Vidacovich et al. include a detent-recess arrangement configured to permit the first (and second) tray to be selectively pivotably mounted relative to the post in a plurality of discrete positions, as taught by Daoud, for the purpose of reducing the complexity and cost of the storage arrangement by eliminating the need for an external fixture to hold the tray when the tray is in one of its plurality of discrete positions.

With regard to Claims 18 and 32, Vidacovich et al. in view of Daoud discloses the invention as set forth above, except for the steps of directing a first cable and a second

cable in the first tray and second tray, respectively, including directing the first and second cable vertically along the frame and in to the first and second tray, respectively. It would have been obvious to one having ordinary skill in the art to route the first and second cable vertically along the frame, instead of horizontally along the base of the cabinet as disclosed by Vidacovich et al. in view of Daoud (See 122 in Figure 11; Figures 10A, 10B, 10C), for the purpose of protecting the optical fiber from breakage or entanglement.

With regard to Claims 19 and 35, Vidacovich et al. in view of Daoud discloses the invention as set forth above, except for the wall defining at least one aperture through which the fiber cable extends. It would have been obvious to one having ordinary skill in the art to provide at least one aperture on the vertical wall parallel to the trays, as well as at least one aperture on the vertical walls perpendicular to the trays as disclosed by Vidacovich et al. in view of Daoud (See for example Figure 1; 50 in Figure 2; col. 4, line 48-col. 5, line 9), for the purpose of providing alternate routing for the fiber cable to minimize cable lengths and reduce cable bending.

11. Claims 3-6, 9-11, 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vidacovich et al. in view of Daoud as applied to Claims 1-2, 12-15, 26-31, 33 above, and further in view of Swenson et al. (U.S. Patent Application Publication No. 2002/0131749A1).

Vidacovich et al. in view of Daoud discloses the invention as set forth above. Vidacovich et al. additionally discloses the first tray including a first plurality of tabs projecting from the spool toward the sidewall (See tabs on 56 in Figure 3); a cable entry

region of the first tray defined by the sidewall and the base and including a neck (See region near 54 in Figure 3) having a flared entrance (See entrance near 52 in Figure 3), the neck including a curved trough (See curved sidewalls near region 54 in Figure 3) extending from the storage region (See area near 57 in Figure 3) toward the flared entrance through the cable entry region (See area near 96 or area near 54 and 52 in Figure 3), the first tray further including a second plurality of tabs projecting from the sidewall and over the trough of the cable entry region (See tabs near 96 in Figure 3), the mounting construction including a post secured to the frame such that the first tray is pivotable mounted on the post (See 38 in Figure 3; 136, 138 in Figure 10A), the storage region defining a first width (See width of storage area near 57 in Figure 3 for example) and the cable entry region defining a second width (See area near 54 in Figure 3 for example) such that the second width is no more than 50% of the first width, and the sidewall including first and second curved arms to define an arched opening and oriented in the cable entry region (See area near 96 in Figure 3). Vidacovich et al. in view of Daoud lacks the sidewall of the first tray including a plurality of scallops. However, Swenson et al. teaches a cable storage device (See Figures 1-2) wherein the sidewalls (See 211, 212, 213, 214, 215, 216, 218 in Figure 1B) incorporate a plurality of scallops (See in particular regions near 19 in Figure 1B). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the sidewall of the first tray include a plurality of scallops, as taught by Swenson et al., in the storage tray arrangement of Vidacovich et al. in view of Daoud. One would have been motivated to

Art Unit: 2872


do this for the purpose of providing strain relief as well as accessibility to the fiber, while keeping the fiber stored on the spool (See paragraph 0053 for example).

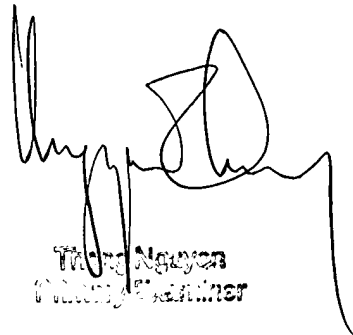
### *Conclusion*

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arnel C. Lavarias whose telephone number is 703-305-4007. The examiner can normally be reached on M-F 8:30 AM - 5 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on 703-305-0024. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1782.

  
Arnel C. Lavarias  
July 23, 2003

  
Thong Nguyen  
Patent Examiner